

Microwave sensors achieve energy-savings by relating lighting to occupation and the extent of daylight.

The microwave sensors provide motion detection within an extended area and incorporate a highly sensitive detector which emits low power microwave signals & measures the reflections as the signals bounce off moving objects.

The sensors connect to plug-in modules or direct to the Dali bus: for ease of installation, a sensor can derive its power from the module or buswire, avoiding the need to provide a 230V supply.



square

round

## microwave presence detector

 product ref: **165M1**

The **microwave presence detector** achieves energy savings by relating lighting to occupation and switching lighting off in vacated areas.

The detector is software-configurable and may be set to **presence mode** (switching lights on when motion is sensed and off after the area is vacated) or **absence mode** (with lighting manually energised by a switch etc) and switched off once the area is vacated): the time-out is also software configurable with a default of fifteen minutes.

The microwave presence detector is supplied with interchangeable square and round clip-on fascias.

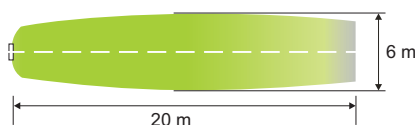
### installation

The sensor should be wall mounted at a height of 1.2m to 1.5m. The sensor should not be located on a vibrating surface or within 1m of any lighting or ventilation equipment and should be sited as far away as possible from the surface of metal objects.

The sensor can connect to the local control bus from **Twelve Twelve** hard-wired modules, or wire directly onto the Dali bus from **Dali Buswire & Dali Broadcast** modules.

### detection field

The sensor provides a linear detection field of 20 metres length by 6 metres width.



Note: unit is very sensitive at maximum setting and may detect motion through thin walls or partitions.

## microwave multisensor

   product ref: **166M1**

The **microwave multisensor** provides enhanced energy-efficiency by combining infra-red presence / absence detection with daylight linking so lighting is related to both occupancy and daylight.

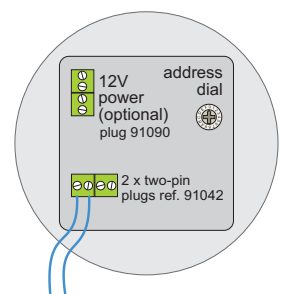
The multisensor operation is fully software-configurable including selection of presence or absence mode, time-out period & photocell sensitivity thresholds.

The multisensor also incorporates an infra-red receiver which receives switching and dimming commands from **personal infra-red transmitters**.

The microwave presence detector is supplied with interchangeable square and round clip-on fascias.

### wiring connections

The sensor obtains its power from the module to which it connects: if more than two microwave sensors are connected on a shared buswire, additional power must be provided using a 12V PSU wired to the sensor.



2c to lighting control module or shared/Dali bus

### dimensions

	round	square
<b>fascia</b>	125 mm	100 x 100 mm
controls - width x height	80 x 80 mm	
depth (front) from wall	20 mm	
depth within wall	25 mm	

Mounts to UK standard single-gang 40mm depth flush box (not supplied)